

Figure 1.

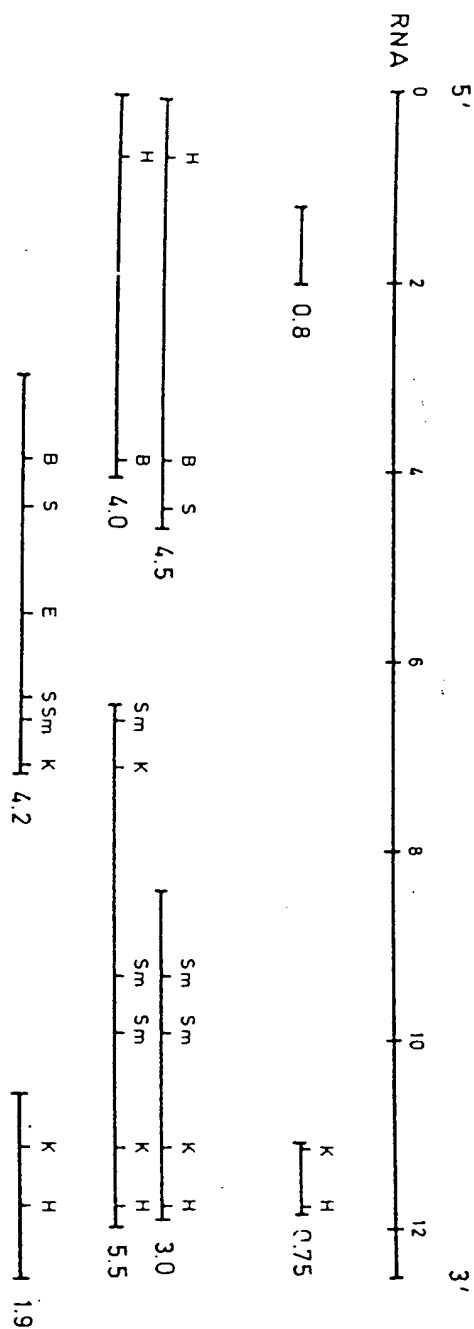


Figure 2.

1 GTT AGC TCT TTC TCG TAT ACG ATA TTG GAT ACA CTA AAT TTC GAT TTG GTC TAG GGC ACC CCT CCA GCG ACG GCC GAA ATG GGC 84
85 TAG CCA TGC CCA TAG TAG GAC TAG CAA ACG GAG GGA CTA GCC GTA GTG GCG AGC TCC CTG GGT CTA AGT CCT GAG TAC AGG 168
169 ACA GTC GTC AGT AGT TCG ACG TGA GCA CTA GCC CAC CTC GAG ATG CTA CGT GGA CGA GGG CAT GCC CAA GAC ACA CCT TAA CCC 252
253 TGG CGG GGG TCG CTA GGG TGA AAT CAC ATT ATG TGA TGG GGG TAC GAC CTG ATA GGG TGC TGC AGA GGC CCA CTA GCA GGC TAG 336
337 TAT AAA AAT CTC TGC TGT ACA TGG CAC ATG GAG TTG AAT CAT TTT GAA TTA TTA TAC AAA ACA AGC AAA CAA AAA CCA CTG GGA 420
1 Met Glu Leu Asn His Phe Glu Leu Leu Tyr Lys Thr Ser Lys Gln Lys Pro Val Gly 19
421 GTG GAG GAA CCG GTG TAT GAC ACC GCG GGG AGA CCA CTA TTT GGG AAC CCA AGT GAG GTA CAC CCA CAA TCA ACG CTG AAG CTG 504
20 Val Glu Glu Pro Val Tyr Asp Thr Ala Gly Arg Pro Leu Phe Gly Asn Pro Ser Glu Val His Pro Gln Ser Thr Leu Lys Leu 47
505 CCA CAC GAC AGG GGG AGA GGA GAT ATC AGA ACA ACA CTG AGG GAC CTA CCC AGG AAA GGT GAC TGT AGG AGT GGC AAC CAT CTA 588
48 Pro His Asp Arg Gly Arg Gly Asp Ile Arg Thr Thr Leu Arg Asp Leu Pro Arg Lys Gly Asp Cys Arg Ser Gly Asn His Leu 75
589 GGC CCG GTT AGT AGT GGG ATA TAC ATA AAG CCC GGC CCT GTC TAC TAT CAG GAC TAC ACG GGC CCA GTC TAT CAC AGA GCT CCT TTA 672
76 Gly Pro Val Ser Gly Ile Tyr Ile Lys Pro Gly Pro Val Tyr Tyr Gln Asp Tyr Thr Gly Pro Val Tyr His Arg Ala Pro Leu 103
673 GAG TTC TTT GAT GAG GCC CAG TTC TGC GAG GTG ACT AAG AGA ATA GGC AGG GTC ACG GGT AGT GAT GGT AAG CTT TAC CAC ATA 756
104 Glu Phe Phe Asp Glu Ala Gln Phe Cys Glu Val Thr Lys Arg Ile Gly Arg Val Thr Gly Ser Asp Gly Lys Leu Tyr His Ile 131
757 TAT GTG TGC GAT GGT TGC ATA CTG CTA GGC AAA GGC GGC ACA CCC AGA ACC CTA AAG TGG ATT AGG AAC TTC ACC 840
132 Tyr Val Cys Val Asp Gly Cys Ile Leu Leu Lys Leu Ala Lys Arg Gly Thr Pro Arg Thr Leu Lys Trp Ile Arg Asn Phe Thr 159
841 AAC TGT CCA TTA TGG GTA ACC AGT TGC TCC GAT GAC GGC CCA AGT GGC AGC AAG GAT AAG AAG CCA GAC AGA ATG AAC AAA GGT 924
160 Asn Cys Pro Leu Trp Val Thr Ser Cys Ser Asp Asp Gly Ala Ser Gly Ser Lys Asp Lys Lys Pro Asp Arg Met Asn Lys Gly 187
925 AAG TTG AAG ATA GCC CCA AGA GAG CAT GAG AAG GAC AGC AAG ACC AAG CCT CCT GAT CCA ACG ATT GTA GTA GAG GGA GTA AAA 1008
188 Lys Leu Lys Ile Ala Pro Arg Glu His Glu Lys Asp Ser Lys Thr Lys Pro Pro Asp Ala Thr Ile Val Val Glu Gly Val Lys 215
1009 TAC CAA ATC AAA AAG AAA GGC AAA GTC AAA GGG AAG AAC ACA CAA GAC GGC CTG TAC CAT AAT AAG AAC AAG CCA CCA GAG TCC 1092
216 Tyr Gln Ile Lys Lys Lys Gly Lys Val Lys Gly Lys Asn Thr Gln Asp Gly Leu Tyr His Asn Lys Asn Lys Pro Pro Glu Ser 243

1093 AGG AAG AAA CTA GAA AAA GCC CTG TTG GCT TGG GCG GTG ATA ACA ATC TTG CTG TAC CAG CCT GTA GCA GCC GAG AAC ATA ACT 1176
244 Arg Lys Lys Leu Glu Lys Ala Leu Leu Ala Trp Ala Val Ile Thr Ile Leu Leu Tyr Gln Pro Val Ala Ala Glu Asn Ile Thr 271

1177 CAA TGG AAC CTG AGT GAC AAC GGC ACT AAT GGT ATT CAG CGA GCC ATG TAT CTT AGA GGG GTT AAC AGG AGC TTA CAT GGG ATC 1260
272 Gln Trp Asn Leu Ser Asp Asn Gly Thr Asn Gly Ile Gln Arg Ala Met Tyr Leu Arg Gly Val Asn Arg Ser Leu His Gly Ile 299

1261 TGG CCC GAG AAA ATA TGC AAG GGG GTC CCC ACT CAT CTG GCC ACT GAC ACG GAA CTG AAA GAG ATA CGC GGG ATG ATG GAT GCC 1344
300 Trp Pro Glu Lys Ile Cys Lys Gly Val Pro Thr His Leu Ala Thr Asp Thr Glu Leu Lys Glu Ile Arg Gly Met Met Asp Ala 327

1345 AGC GAG AGG ACA AAC TAT ACG TGC TGT AGG TTA CAA AGA CAT GAA TGG AAC AAA CAT GGA TGG TGT AAC TGG TAC AAC ATA GAC 1428
328 Ser Glu Arg Thr Asn Tyr Thr Cys Cys Arg Leu Gln Arg His Glu Trp Asn Lys His Gly Trp Cys Asn Trp Tyr Asn Ile Asp 355

1429 CCT TGG ATT CAG TTA ATG AAC AGG ACC CAA ACA AAT TTG ACA GAA GGC CCT CCA GAT AAG GAG TGT GCC GTG ACC TGC AGG TAT 1512
356 Pro Trp Ile Gln Leu Met Asn Arg Thr Gln Thr Asn Leu Thr Glu Gly Pro Pro Asp Lys Glu Cys Ala Val Thr Cys Arg Tyr 383

1513 GAC AAA AAT ACC GAT GTC AAC GTG GTC ACC CAG GCC AGG AAT AGG CCA ACT ACT CTG ACT GGC TGC AAG AAA GGG AAA AAC TTT 1596
384 Asp Lys Asn Thr Asp Val Asn Val Val Thr Gln Ala Arg Asn Arg Pro Thr Thr Leu Thr Gly Cys Lys Lys Gly Lys Asn Phe 411
Ala

1597 TCA TTC GCA GGC ACA GTC ATA GAG GGC CCG TGC AAT TTC AAC GTT TCC GTG GAG GAC ATC TTA TAC GGA GAC CAT GAG TGT GGC 1680
412 Ser Phe Ala Gly Thr Val Ile Glu Gly Pro Cys Asn Phe Asn Val Ser Val Glu Asp Ile Leu Tyr Gly Asp His Glu Cys Gly 439

1681 AGT CTG CTC CAG GAC ACG GCT CTG TAC CTA TTG GAT GGA ATG ACC AAC ACT ATA GAG AAT GCC AGG CAA GGT GCG GCG GTG 1764
440 Ser Leu Leu Gln Asp Thr Ala Leu Tyr Leu Leu Asp Gly Met Thr Asn Thr Ile Glu Asn Ala Arg Gln Gly Ala Ala Arg Val 467

1765 ACA TCT TGG CTT GGG AGG CAG CTC AGT ACC GCA GGG AAG AAG CTA GAG AGG AGA AGC AAA ACC TGG TTT GGT GCC TAT GCC CTG 1848
468 Thr Ser Trp Leu Gly Arg Gln Leu Ser Thr Ala Gly Lys Leu Glu Arg Ser Lys Thr Trp Phe Gly Ala Tyr Ala Leu 495

1849 TCA CCT TAC TGC AAT GTG ACT AGA AAA ATA GGG TAC ATA TGG TAT ACA AAC AAC TGC ACC CCG GCA TGC CTC CCT AAG AAC ACA 1932
496 Ser Pro Tyr Cys Asn Val Thr Arg Lys Ile Gly Tyr Ile Trp Tyr Thr Asn Asn Cys Thr Pro Ala Cys Leu Pro Lys Asn Thr 523

1933 AAA ATA ATA GGC CCT GGA AAG TTT GAC ACC AAT CCG GAA GAC GGG AAG ATC CTT CAT GAA ATG GGG GGC CAC CTA TCA GAA TTT 2016
524 Lys Ile Ile Gly Pro Gly Lys Phe Asp Thr Asn Ala Glu Asp Gly Lys Ile Leu His Glu Met Gly Gly His Leu Ser Glu Phe 551

2017 TTG TTG CTT TCT CTA GTT ATC CTG TCT GAC TTT GCC CCC GAG ACA GCT AGC ACG CTA TAC CTA ATT TTA CAC TAT GCA ATC CCC 2100
552 Leu Leu Leu Ser Leu Val Ile Leu Ser Asp Phe Ala Pro Glu Thr Ala Ser Thr Leu Tyr Leu Ile Leu His Tyr Ala Ile Pro 579

2101	CAG TCC CAC GAA GAA CCT GAA GGT TGT GAT ACG AAC CAA CTT AAC CTA ACA GTG AAA CTT AGG ACA GAA GAC GTA GTG CCA TCA	2184
580	Gln Ser His Glu Glu Pro Glu Gly Cys Asp Thr Asn Gln Leu Asn Leu Thr Val Lys Leu Arg Thr Glu Asp Val Val Pro Ser	607
2185	TCA GTT TGG AAT ATT GGC AAA TAT GTT TGT AGA CCA GAC TGG TGG CCG TAT GAA ACT AAA GTG OCT CTG CTG TTT GAA GAG	2268
608	Ser Val Trp Asn Ile Gly Lys Tyr Val Cys Val Arg Pro Asp Trp Trp Pro Tyr Glu Thr Lys Val Ala Leu Leu Phe Glu Glu	635
2269	GCA GGA CAG GTT ATA AAG CTA GTC CTA CGG GCA CTG AGG GAT TTA ACT AGG GTC TGG AAC AGC GCA TCA ACT ACT GCG TTT CTC	2352
636	Ala Gly Gln Val Ile Lys Leu Val Leu Arg Ala Leu Arg Asp Leu Thr Arg Val Trp Asn Ser Ala Ser Thr Thr Ala Phe Leu	663
2353	ATT TGC TTG ATA AAA GTA TTG AGA GGA CAG GTT GTG CAA GGT ATA ATA TGG CTG CTG CTG GGT GCA CAA GGG CGG CTA	2436
664	Ile Cys Leu Ile Lys Val Leu Arg Gly Gln Val Val Gln Gly Ile Ile Trp Leu Leu Val Thr Gly Ala Gln Gly Arg Leu	691
2437	GCC TGT AAG GAA GAC TAC AGG TAT GCG ATC TCG TCA ACC AAT GAG ATA GGG CTG CTG GGC GCT GAA GGT CTC ACC ACT ACC TGG	2520
692	Ala Cys Lys Glu Asp Tyr Arg Tyr Ala Ile Ser Ser Thr Asn Glu Ile Gly Leu Leu Gly Ala Glu Gly Leu Thr Thr Trp	719
2521	AAA GAA TAC AGC CAC GGT TTG CAG CTG GAC GGA ACC GGT AAG GCC CTC TGC ACT GCA GGG TCC TTT AAA GTC ACA GCA CTT	2604
720	Lys Glu Tyr Ser His Gly Leu Gln Leu Asp Asp Gly Thr Val Lys Ala Val Cys Thr Ala Gly Ser Phe Lys Val Thr Ala Leu	747
2605	AAC GTG GTT AGT AGG AGG TAT CTA GCA TCA TTG CAC AAG AGG GCT CTA CCC ACC TCA GTG ACA TTT GAG CTC CTA TTT GAC GGG	2688
748	Asn Val Val Ser Arg Arg Tyr Leu Ala Ser Leu His Lys Arg Ala Leu Pro Thr Ser Val Thr Phe Glu Leu Leu Phe Asp Gly	775
2689	ACC AAC CCA GCA ATC GAG GAG ATG GAT GAT GAC TTC GGA TTT GGG CTG TGC CCA TTT GAC ACG AGT CCT GTG ATC AAA GGG AAG	2772
776	Thr Asn Pro Ala Ile Glu Glu Met Asp Asp Phe Gly Phe Gly Leu Cys Pro Phe Asp Thr Ser Pro Val Ile Lys Gly Lys	803
2773	TAC AAC ACC ACT TTG TTA AAC GGC AGT GCT TTC TAT CTA GTC TGC CCA ATA GGA TGG ACT GGT GTC GTA GAG TGC ACA GCA GTG	2856
804	Tyr Asn Thr Thr Leu Leu Asn Gly Ser Ala Phe Tyr Leu Val Cys Pro Ile Gly Trp Thr Gly Val Val Glu Cys Thr Ala Val	831
2857	AGC CCC ACA ACC TTG AGA ACA GAA GTG GTG AAA ACC TTC AGG AGA GAT AAG CCT TTT CCA CAT AGA GTA GAC TGT GTG ACC ACC	2940
832	Ser Pro Thr Thr Leu Arg Thr Glu Val Val Lys Thr Phe Arg Arg Asp Lys Pro Phe Pro His Arg Val Asp Cys Val Thr Thr	859
2941	ATA GTA GAA AAA GAA GAC CTA TTC CAT TGC AAG TTG GGG GGT AAT TGG ACA TGT GTA AAA GGC GAC CCA GTG ACT TAT AAG GGG	3024
860	Ile Val Glu Lys Glu Asp Leu Phe His Cys Lys Leu Gly Gly Asn Trp Thr Cys Val Lys Gly Asp Pro Val Thr Tyr Lys Gly	887
3025	GGG CAA GTA AAG CAG TGC AGG TGT TGT TGC TTT AAA GAG CCC TAC GGG CTC CCA CAC TAC CCT ATA GGC AAG TGC ATC	3108
888	Gly Gln Val Lys Gln Cys Arg Trp Cys Gly Phe Glu Phe Lys Glu Pro Tyr Gly Leu Pro His Tyr Pro Ile Gly Lys Cys Ile	915

3109 CTA ACA AAT GAG ACA GGT TAC AGG GTA GTA GAT TCC ACA GAC TGC AAC AGA GAT GGC GTC GTT ATT AGC ACT GAA GGG GAA CAT 3192
 916 Leu Thr Asn Glu Thr Gly Tyr Arg Val Val Asp Ser Thr Asp Cys Asn Arg Asp Gly Val Val Ile Ser Thr Glu Gly Glu His 943

 3193 GAG TGC TTG ATT GGC AAC ACT ACC GTC AAG GTG CAT GCA CTG GAT GAA AGA TTG GGC CCT ATG CCG TGC AGA CCC AAA GAA ATC 3276
 944 Glu Cys Leu Ile Gly Asn Thr Thr Val Lys Val His Ala Leu Asp Glu Arg Leu Gly Pro Met Pro Cys Arg Pro Lys Glu Ile 971

 3277 GTC TCT AGT GAG GGA CCT GTG AGG AAA ACT TCT TGT ACA TTC AAC TAC ACA AAG ACT CTA AGA AAC AAA TAC TAT GAG CCC AGA 3360
 972 Val Ser Ser Glu Gly Pro Val Arg Lys Thr Ser Cys Thr Phe Asn Tyr Thr Lys Thr Leu Arg Asn Lys Tyr Tyr Glu Pro Arg 999

 3361 GAC AGT TAC TTC CAG CAA TAT ATG CTC AAG GGC GAG TAT CAA TAC TGG TTT AAT CTG GAC GTG ACC GAC CAC CAC ACA GAC TAC 3444
 1000 Asp Ser Tyr Phe Gln Gln Tyr Met Leu Lys Lys Gly Glu Tyr Gln Tyr Trp Phe Asn Leu Asp Val Thr Asp His His Thr Asp Tyr 1027

 3445 TTT GCC GAG TTT GTT GTC TTG GTA GTA GTA GCA CTG TTA GGA GGA AGG TAC GTT CTG TGG CTA ATA GTG ACC TAC ATA ATT CTA 3528
 1028 Phe Ala Glu Phe Val Val Leu Val Val Val Ala Leu Leu Glu Gly Arg Tyr Val Leu Trp Leu Ile Val Thr Tyr Ile Ile Leu 1055

 3529 ACA GAG CAG CTC GCT GCT CTA CAG CTA GGC CAG GGT GAG GTG GTA TTG ATA GGG AAC CTA ATT ACC CAC ACG GAC AAC GAT GAG 3612
 1056 Thr Glu Gln Leu Ala Ala Gly Leu Gln Leu Gly Gln Gly Val Val Leu Ile Gly Asn Leu Ile Thr His Thr Asp Asn Glu 1083

 3613 GTG GTG GTG TAC TTC CTA CTC TAC TTA GTA ATA AGA GAT GAG CCC ATA AAG AAA TGG ATA CTA CTG CTG TTT CAT GCA ATG 3696
 1084 Val Val Val Tyr Phe Leu Leu Leu Tyr Leu Val Ile Arg Asp Glu Pro Ile Lys Lys Trp Ile Leu Leu Leu Phe His Ala Met 1111

 3697 ACT AAC AAT CCA GTC ACC AGT TTT GAC ATC ACA GTA TTA GCA TTA GCA TTA GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT 3780
 1112 Thr Asn Asn Pro Val Lys Thr Ile Thr Val Ala Leu Leu Met Ile Ser Gly Val Ala Lys Gly Gly Lys Ile Asp Gly Gly Trp 1139

 3781 CAG AGA CAA CCG GTG ACC AGT TTT GAC ATC CAA CTC GCA CTG GCA GTG GTA GTC GTC GTC GTC GTC GTC GTC GTC GTC 3864
 1140 Gln Arg Gln Pro Val Thr Ser Phe Asp Ile Gln Leu Ala Leu Ala Val Val Val Val Val Val Val Val Val Val Val Val Val Val 1167

 3865 CCG ACT ACT TTC CCT TTG GTA ATC ACA GTG GCA ACC CTG AGA CCG GGC AAG ATA ACC AAC GGT TTT AGC ACA GAT CTA GTC ATA 3948
 1168 Pro Thr Thr Phe Pro Leu Val Ile Thr Val Ala Thr Leu Arg Thr Ala Lys Ile Thr Asn Gly Phe Ser Thr Asp Leu Val Ile 1195

 3949 GCC ACA GTG TCG GCA GCT TTG TTA ACT TGG ACC TAT ATC AGC GAC TAC TAC AAA TAC AAG ACT TGG CTA CAG TAC CTC GTC AGC 4032
 1196 Ala Thr Val Ser Ala Ala Leu Leu Thr Thr Tyr Ile Ser Asp Tyr Tyr Lys Thr Trp Leu Gln Tyr Leu Val Ser 1233

 4033 ACG GTG ACT GGA ATC TTC CTG ATA AGG GTG CTG AAG GGA ATA GGC GAA TTG GAT CTG CAC GCC CCA ACC TTG CCG TCT CAC AGA 4116
 1224 Thr Val Thr Gly Ile Phe Leu Ile Arg Val Leu Lys Gly Ile Gly Glu Leu Asp Leu His Ala Pro Thr Leu Pro Ser His Arg 1251

4117	CCC CTC	TTT TAC	ATC CTC	TTT GTA	TAC CTC	ATT TCC	ACT GCC	GTG GTA	ACT AGA	TGG AAT	CTG GAC	GTA GCC	GGA TTG	TTG CTG	CAG	4200								
1252	Pro	Leu	Phe	Tyr	Ile	Leu	Val	Tyr	Leu	Ile	Ser	Thr	Ala	Val	Thr	Arg	Trp	Asn	Leu	Leu	Leu	Gln	1279	
4201	TGC	GTG	CCA	ACT	CTT	TTA	ATG	GTT	TTT	ACG	ATG	TGG	GCA	GAC	ATT	CTC	ACC	CTA	ATA	CTC	ACT	CTA	CTA	4284
1280	Cys	Val	Pro	Thr	Leu	Leu	Met	Val	Phe	Thr	Met	Trp	Ala	Asp	Ile	Leu	Thr	Leu	Ile	Leu	Ile	Leu	Pro	1307
4285	AAG	TTA	TAC	TAC	CTT	AAG	GAA	GTG	AAG	ATT	GGG	GCA	GAA	AGA	GGT	TGG	CTG	TGG	AAA	ACT	AAC	TAT	AAG	4368
1308	Lys	Leu	Tyr	Tyr	Leu	Lys	Glu	Val	Lys	Ile	Gly	Ala	Glu	Arg	Gly	Trp	Leu	Trp	Lys	Thr	Asn	Tyr	Lys	1335
4369	TAC	GAG	GTG	GAC	CAA	ACT	AGC	GAA	GGG	GTT	TAC	CTT	TTC	CCT	TCT	AAA	CAG	ACG	AGC	GCT	ATA	ACT	AGT	4452
1336	Tyr	Glu	Val	Asp	Gln	Thr	Ser	Glu	Gly	Val	Tyr	Leu	Phe	Pro	Ser	Lys	Gln	Arg	Thr	Ser	Ala	Ile	Thr	1363
4453	TTA	ATC	ALA	GCC	ATA	CTC	ATT	AGC	TGC	ATC	AGC	AAC	AAG	TGG	CAA	CTC	ATA	TAC	TTA	CTG	TAC	TTG	ATA	4536
1364	Leu	Ile	Lys	Ala	Ile	Leu	Ile	Ser	Cys	Ile	Ser	Asn	Lys	Trp	Gln	Leu	Ile	Tyr	Leu	Leu	Tyr	Leu	Ile	1391
4537	TAC	CTC	CAC	AAG	AAA	GTT	ATA	GAT	GAA	ATA	GCT	GGG	ACC	AAC	TTC	GTT	TCA	AGG	CTC	GTG	GCG	GCT	TTG	4620
1392	Tyr	Leu	His	Lys	Lys	Val	Ile	Asp	Glu	Ile	Ala	Gly	Gly	Thr	Asn	Phe	Val	Ser	Arg	Leu	Val	Ala	Leu	1419
4621	TGG	GCC	TTC	GAC	AAT	GAA	GTC	AAA	GGC	TTA	AAG	AAG	TTC	TTC	TTG	CTG	TCT	AGT	AGG	GTC	AAA	GAG	TTG	4704
1420	Trp	Ala	Phe	Asp	Asn	Glu	Glu	Val	Lys	Gly	Leu	Lys	Lys	Phe	Phe	Leu	Leu	Ser	Ser	Arg	Val	Lys	Glu	1447
4705	AAA	GTG	AGG	AAT	GAA	GTA	GTG	GTC	CGC	TGG	TTT	GGA	GAT	GAA	GAG	ATT	TAT	GGG	ATG	CCA	AAG	CTG	ATC	4788
1448	Lys	Val	Arg	Asn	Glu	Val	Val	Val	Arg	Trp	Phe	Gly	Asp	Glu	Glu	Ile	Tyr	Gly	Met	Pro	Lys	Leu	Ile	1475
4789	GCA	ACA	CTA	AGT	AGA	AAC	AAA	CAC	TGT	ATG	TTG	TGT	ACC	GTC	TGT	GAG	GAC	AGA	GAT	TGG	AGA	GGG	GAA	4872
1476	Ala	Thr	Leu	Ser	Arg	Asn	Lys	His	Cys	Met	Leu	Cys	Thr	Val	Cys	Glu	Val	Asp	Arg	Asp	Trp	Arg	Gly	1501
4873	GGG	CGT	TTT	GGA	CCA	CCA	GTG	GTC	TGC	GGT	ATG	ACC	CTA	QCC	GAT	TTC	GAA	GAA	AAA	CAC	TAT	AAA	AGG	4956
1504	Gly	Arg	Phe	Gly	Pro	Pro	Val	Val	Val	Cys	Gly	Met	Thr	Leu	Ala	Asp	Phe	Glu	Glu	Lys	His	Tyr	Lys	1531
4957	GAC	CAA	TCA	GGC	GGG	CCA	CTT	AGG	GAG	GAG	CAT	GCA	GGG	TAC	TTG	CAG	TAC	AAA	GCC	AGG	GGT	CAA	CTG	5040
1532	Asp	Gln	Ser	Gly	Gly	Pro	Leu	Arg	Glu	Glu	His	Ala	Gly	Tyr	Leu	Gln	Tyr	Lys	Ala	Arg	Gly	Gln	Phe	1559
5041	CCA	GTG	TTA	GCT	ACA	AAA	GTC	AAG	ATG	CTC	GTT	GGT	AAC	CTC	GGG	ACA	GAG	ATT	GGG	GAT	CTG	GAA	CAC	5124
1560	Pro	Val	Leu	Ala	Thr	Lys	Val	Lys	Met	Leu	Leu	Val	Gly	Asn	Leu	Gly	Thr	Glu	Ile	Gly	Asp	Leu	Glu	1587

5125 CTT AGA GGG CCA GCT GTT TGC AAG AAG GTT ACT GAA CAC GAA AGA TGC ACC ACG TCT ATA ATG GAT AAG TTG ACT GCT TTC TTT 5208
 1588 Leu Arg Gly Pro Ala Val Cys Lys Lys Val Thr Glu His Glu Arg Cys Thr Thr Ser Ile Met Asp Lys Leu Thr Ala Phe Phe 1615

5209 GGA GTA ATG CCA AGG GGC ACT ACT CCC AOA GCT CCC GTA AGA TTC CCT ACC TCC CTC CTA AAG ATA AGA AGA GGG CTG GAG ACT 5292
 1616 Gly Val Met Pro Arg Gly Thr Thr Pro Arg Ala Pro Val Arg Phe Pro Thr Ser Leu Leu Lys Ile Arg Arg Gly Leu Glu Thr 1643

5293 GGT TGG GCT TAC ACA CAC CAA GGT GGC ATC AGC TCA GTA GAC CAT GTC ACT TGT GGG AAA GAC TTA CTG GTG TGT GAC ACC ATG 5376
 1644 Gly Trp Ala Tyr Thr His Glu Gly Gly Ile Ser Ser Val Asp His Val Thr Cys Gly Lys Asp Leu Leu Val Cys Asp Thr Met 1671

5377 GGT CGG ACA AGG GTT GTT TGC CAG TCA AAT AAT AAG ATG ACC GAC GAG TCC GAA TAC GGA GTC AAA ACT GAC TCC GGG TCC CCA 5460
 1672 Gly Arg Thr Arg Val Val Cys Gln Ser Asn Asn Lys Met Thr Asp Glu Ser Glu Tyr Gly Val Lys Thr Asp Ser Gly Cys Pro 1699

5461 GAG GGA GCC AGG TGT TAC GTG TTT AAC CCG GAA GCA GTT AAC ATA TCA GGC ACT AAA GGA GCC ATG GTC CAC TTA CAG AAA ACG 5544
 1700 Glu Gly Ala Arg Cys Tyr Val Phe Asn Pro Glu Ala Val Asn Ile Ser Gly Thr Lys Gly Ala Met Val His Leu Gln Lys Thr 1727

5545 GGT GGA GAA TTC ACC TGT GTG ACA GCA TCA GGA ACC CCG GCC TTC TTT GAC CTC AAG AAC CTT AAG GGC TGG TCA GGG CTA CCG 5628
 1728 Gly Gly Glu Phe Thr Cys Val Thr Ala Ser Gly Thr Pro Ala Phe Phe Asp Leu Lys Asn Leu Lys Gly Trp Ser Gly Leu Pro 1755

5629 ATA TTT GAA GCA TCA AGT GGA AGG GTA GTC GGA AGG GTC AAG AAG AAC GAG GAT TCC AAA CCA ACC AAG CTC ATG AGT 5712
 1756 Ile Phe Glu Ala Ser Ser Gly Arg Val Val Gly Arg Val Lys Val Gly Lys Asn Glu Asp Ser Lys Pro Thr Lys Leu Met Ser 1783

5713 GGG ATA CAA ACG GTT TCT AAA AGC GCC ACA GAC TTG ACG GAG ATG GTG AAG AAG ATA ACG ACC ATG AAC AGG GGA GAG TTC AGA 5796
 1784 Gly Ile Gln Thr Val Ser Lys Ser Ala Thr Asp Leu Thr Glu Leu Pro Arg Ser Val Ile Thr Thr Met Asn Arg Gly Glu Phe Arg 1811

5797 CAA ATA ACC CTG GCC ACA GGT GCC GGA AAA ACT ACA GAG CTC CCT AGA TCA GTT ATA GAA GAG ATA GGG AGG CAT AAG AGG GTG 5880
 1812 Gln Ile Thr Leu Ala Thr Glu Ala Thr Gly Ala Gly Lys Thr Thr Glu Leu Pro Arg Ser Val Ile Glu Glu Ile Gly Arg His Lys Arg Val 1839

5881 TTG GTC TTA ATC CCC TTG AGG GCG GCA GCA TCA GTA TAC CAA TAC ATG AGA CAG AAA CAT CCG AGT ATA GCA TTC AAT CTA 5964
 1840 Leu Val Leu Ile Pro Leu Arg Ala Ala Ala Glu Ser Val Tyr Gln Tyr Met Arg Gln Lys His Pro Ser Ile Ala Phe Asn Leu 1867

5965 AGG ATA GGT GAG ATG AAG GAA GGT GAT ATG GCC ACG GGA ATA ACC TAT GCC TCT TAC GGT TAC TTT TCC CAG ATG TCA CAA CCC 6048
 1868 Arg Ile Gly Glu Met Lys Glu Gly Asp Met Ala Thr Gly Ile Thr Tyr Ala Ser Tyr Gly Tyr Phe Cys Gln Met Ser Gln Pro 1895

6049 AAG CTG AGA GCC GCA ATG GTA GAA TAT TCC TTT ATA TTC CTA GAT GAG TAT CAT TGT GCT ACC CCA GAA CAA CTG GCA ATC ATG 6132
 1896 Lys Leu Arg Ala Ala Met Val Glu Tyr Ser Phe Ile Phe Leu Asp Glu Tyr His Cys Ala Thr Pro Glu Gln Leu Ala Ile Met 1923

6113	GGG AAG ATC CAC AGA TTC TCA GAA AAC CTG CGG GTG GTA GCT ATG ACA GCG ACA CCG GCA GGC ACA GTA ACA ACC ACT GCG CAG	6216
1924	Gly Lys Ile His Arg Phe Ser Glu Asn Leu Arg Val Val Ala Met Thr Ala Thr Pro Ala Gly Thr Val Thr Thr Thr Gly Gln	1951
6317	AAA CAC CCT ATA GAG GAA TTT ATA GCC CCG GAA GTG ATG AAA GGA GAA GAC TTG GGT TCT GAG TAC TTA GAT ATT GCC GGA CTG	6300
1952	Lys His Pro Ile Glu Glu Phe Ile Ala Pro Glu Val Met Lys Gly Glu Asp Leu Gly Ser Glu Tyr Leu Asp Ile Ala Gly Leu	1979
6301	AAG ATA CCA GTA GAG GAG ATG AAG AAT AAC ATG CTA GTT TTT GTG CCC ACC AGG AAC ATG CCG GTA GAG CCG GCA AAG AAA TTG	6384
1980	Lys Ile Pro Val Glu Glu Met Lys Asn Asn Met Leu Val Phe Val Pro Thr Arg Asn Met Ala Val Glu Ala Ala Lys Lys Leu	2007
6385	AAG GCC AAA GGA TAC AAC TCG GGC TAC TAC AAC GGA GAG GAC CCA TCT AAC CTG AGG GTG GTG ACG TCG CAG TCC CCA TAC	6468
2008	Lys Ala Lys Gly Tyr Asn Ser Gly Tyr Tyr Ser Gly Glu Asp Pro Ser Asn Leu Arg Val Val Thr Ser Gln Ser Pro Tyr	2035
6469	GTG GTG GTA GCA ACC AAC GCA ATA GAA TCG GGC GTT ACC CTC CCG GAC CTG GAC GTG GTT GTC GAC ACG GGA CTC AAG TGT GAA	6552
2036	Val Val Val Ala Thr Asn Ala Ile Glu Ser Gly Val Thr Leu Pro Asp Leu Asp Val Val Asp Thr Gly Leu Lys Cys Glu	2063
6553	AAA AGA ATC CGA CTG TCA CCC AAG ATG CCT TTC ATA GTG ACG GGC CTG AAA AGA ATG GGC GTC ACT ATT GGG GAA CAA GCC CAG	6636
2064	Lys Arg Ile Arg Leu Ser Pro Lys Met Pro Phe Ile Val Thr Gly Leu Lys Arg Met Ala Val Thr Ile Gly Glu Ala Gln	2091
6637	AGA AGA GGG AGG GTT GGA AGA GTG AAG CCC GGG AGA TAC TAC AGG AGT CAA GAA ACA CCT GTC GGC TCT AAA GAC TAC CAT TAT	6720
2092	Arg Arg Gly Arg Val Gly Arg Val Lys Pro Gly Arg Tyr Tyr Arg Ser Gln Glu Thr Pro Val Gly Ser Lys Asp Tyr His Tyr	2119
6711	GAC TTA TTG CAA GCC CAG AGG TAC GGC ATA GAA GAT GGG ATA AAT ATC ACC AAA TCC TTC AGA GAG ATG AAC TAC GAC TGG AGC	6804
2120	Asp Leu Leu Gln Ala Gln Arg Tyr Gly Ile Glu Asp Gly Ile Asn Ile Thr Lys Ser Phe Arg Glu Met Asn Tyr Asp Trp Ser	2147
6805	CCT TAT GAG GAA GAT AGC CTG ATG ATC ACA CAA CTG GAA ATC CTC AAC CAG TTG ATA TCA GAA GAG CTG CCG ATG GCA GTA	6888
2148	Leu Tyr Glu Glu Asp Ser Leu Met Ile Thr Gln Leu Glu Ile Leu Asn Asn Leu Leu Ile Ser Glu Glu Leu Pro Met Ala Val	2175
6889	AAA AAT ATA ATG GCC AGG ACC GAC CAC CCA GAA CCA ATT CAA CTC GCG TAT AAC ACC TAC GAG ACA CAG GTG CCG GTA TTA TTC	6972
2176	Lys Asn Ile Met Ala Arg Thr Asp His Pro Glu Pro Ile Gln Leu Ala Tyr Asn Ser Tyr Glu Thr Gln Val Pro Val Leu Phe	2203
6973	CCA AAA ATA AGA AAT GGA GAG GTG ACT GAT TAC TAC ACC TTC CTC AAT GCA AGA AAA TTG GGA GAT GAC GTA CCC	7056
2204	Pro Lys Ile Arg Asn Gly Glu Val Thr Asp Thr Tyr Asp Asn Tyr Thr Phe Leu Asn Ala Arg Lys Leu Gly Asp Asp Val Pro	2231
7057	CCC TAC GTG TAT GCT ACA GAG GAT GAG TCG GAA CTG TCG GGC CTA GAT TGG CCG GAC CCA GGA AAC CAA GGC ACC	7140
2232	Pro Tyr Val Tyr Ala Thr Glu Asp Glu Asp Leu Ala Val Glu Leu Leu Gly Leu Asp Trp Pro Asp Pro Gly Asn Gln Gly Thr	2259

7141	GTG GAA GCT GGC AGA GCA CTA AAA CAG GTG GTT GGT CTA TCA ACA GCA GAG AAC GCC CTG CTA GTC GCC CTG TTC GGC TAC GTG	7224
2260	Val Glu Ala Gly Arg Ala Leu Lys Gln Val Val Gly Leu Ser Thr Ala Glu Asn Ala Leu Val Ala Leu Phe Gly Tyr Val	2287
7225	GGG TAC CAG GCG CTT TCA AAG AGA CAT ATA CCA GTG GTC ACA GAT ATA TAT TCA GTA GAA GAT CAC AGG CTA GAG GAC ACT ACG	7308
2288	Gly Tyr Gln Ala Leu Ser Lys Arg His Ile Pro Val Val Thr Asp Ile Tyr Ser Val Glu Asp His Arg Leu Glu Asp Thr Thr	2315
7309	CAC CTA CAG TAT GCT CCG AAT GCC ATC AAG ACG GAG GGG AAG GAA ACT GAA TGG AAG GAG CTG GCT CAG GGG GAT GTG CAG AGA	7392
2316	His Leu Gln Tyr Ala Pro Asn Ala Ile Lys Thr Glu Gly Lys Glu Thr Glu Leu Lys Glu Leu Ala Gln Gly Asp Val Gln Arg	2343
7393	TGT GTG GAA GCA GTG ACC AAT TAT GCG AGA GAG GGC ATC CAA TTC ATG AAG TCG CAG GCA CTG AAA GTG AGA GAA ACC CCT ACC	7476
2344	Cys Val Glu Ala Val Thr Asn Tyr Ala Arg Glu Gly Ile Gln Phe Met Lys Ser Gln Ala Leu Lys Val Arg Glu Thr Pro Thr	2371
7477	TAT AAA GAG ACA ATG AAC ACC GTG GCA GAT TAT GTG AAA AAG TTT ATT GAG GCA CTG ACG GAT AGC AAG GAA GAC ATC ATT AAA	7560
2372	Tyr Lys Glu Thr Met Asn Thr Val Ala Asp Tyr Val Lys Lys Phe Ile Glu Ala Leu Thr Asp Ser Lys Glu Asp Ile Ile Lys	2399
7561	TAT GGG CTG TGG GGG OCA CAT ACG OCA TTG TAT AAG AGC ATT GGT GCC AGG CTT GGT CAC GAA ACC GCG TTC GCA ACT CTA GTT	7644
2400	Tyr Gly Leu Trp Gly Ala His Thr Ala Leu Tyr Lys Ser Ile Gly Ala Arg Leu Gly His Glu Thr Ala Phe Ala Thr Leu Val	2427
7645	GTG AAG TGG TTG GCA TTT GGG GAG TCA ATA TCA GAC CAC ATA AAG CAA JCG GCC ACA GAC TTG GTC GTT TAT TAC ATT ATT	7728
2428	Val Lys Trp Leu Ala Phe Gly Gly Glu Ser Ile Ser Asp His Ile Lys Gln Ala Ala Thr Asp Leu Val Val Tyr Tyr Ile Ile	2455
7729	AAC AGA GCT CAA TTC CCA GGA GAC ACA GAA ACA CAA CAA GAA GGG AGA AAA TTT GTT GCC AGC CTG CTA GTC TCA GCT CTA GCG	7812
2456	Asn Arg Pro Gln Phe Pro Gly Asp Thr Glu Thr Gln Gln Glu Gly Arg Lys Phe Val Ala Ser Leu Leu Val Ser Ala Leu Ala	2483
7813	ACT TAT ACA TAC AAG AGC TGG AAC TAC AAT AAT CTG TCC AAA ATA GTT GAA CCG GCT TTG GCT ACC CTG CCC TAT GCC GCT AAA	7896
2484	Thr Tyr Thr Tyr Lys Ser Trp Asn Tyr Asn Asn Leu Ser Lys Ile Val Glu Pro Ala Leu Ala Thr Leu Pro Tyr Ala Ala Lys	2511
7897	GCC CTC AAG CTA TTT GCT CCT ACC CGA CTG GAG AGC GTT GTC ATA CTG AGC ACT GCA ATC TAC AAA ACA TAC CTA TCA ATA AGG	7980
2512	Ala Leu Lys Leu Phe Ala Pro Thr Arg Leu Glu Ser Val Val Ile Leu, Ser Thr Ala Ile Tyr Lys Thr Tyr Leu Ser Ile Arg	2539
7981	CGA GGC AAA AGT GAT GGT CTA GGT ACA GGG GTT AGC GCG GCC ATG GAA ATT ATG TCA CAA AAC CCA GTA TCT GTG GGT ATA	8064
2540	Arg Gly Lys Ser Asp Gly Leu Leu Gly Thr Gly Val Ser Ala Ala Met Glu Ile Met Ser Gln Asn Pro Val Ser Val Gly Ile	2567
8065	GCA GTT ATG CTA GGG GTA GGG GCT GTA GCA GCC CAC AAT GCA ATT GAA GCC AGT GAG CAA AAA AGA ACA CTA CTT ATG AAA GTC	8148
2568	Ala Val Met Leu Gly Val Gly Ala Val Ala Ala His Asn Ala Ile Glu Ala Ser Glu Gln Lys Arg Thr Leu Leu Met Lys Val	2595

8149	TTT GTG AAA AAC TTC TTA GAC CAG GCC GCC ACC GAC GAA CTA GTC AAA GAG AGC CCT GAG AAA ATA ATA ATG GCT TTG TTC GAA	8232
2596	Phe Val Lys Asn Phe Leu Asp Gln Ala Ala Thr Asp Glu Val Lys Glu Ser Pro Glu Lys Ile Ile Met Ala Leu Phe Glu	2623
8233	GCG GTG CAA ACG GTG GGC AAC CCT CTT AGA TTA GTG TAC CAC CTC TAT TTA GGT TTC TAT AAA GGG TGG GGA GCA AAA GAG TTG	8316
2624	Ala Val Gln Thr Val Gly Asn Pro Leu Arg Leu Val Tyr His Leu Tyr Gly Val Phe Tyr Lys Gly Trp Glu Ala Lys Glu Leu	2651
8317	GCC CAA AGA ACA GCC GGC ACG AAC CTT TTC ACC TTG ATA ATG TTC GAG GCT GTG GAA CTA CTG GGA GTA GAC AGT GAG GGA AAA	8400
2652	Ala Gln Arg Thr Ala Gly Arg Asn Leu Phe Thr Leu Ile Met Phe Glu Ala Val Glu Leu Leu Gly Val Asp Ser Glu Gly Lys	2679
8401	ATT CGC CAG CTA TCG AGC AAT TAC ATA CTA GAG CTC TTG TAT AAG TTC CGC GAC AAT ATC AAG TCT AGT GTG AGG GAG ATA GCA	8484
2680	Ile Arg Gln Leu Ser Ser Asn Tyr Ile Leu Glu Leu Tyr Lys Phe Arg Asp Asn Ile Lys Ser Val Arg Glu Ile Ala	2707
8485	ATC AGC TGG GCC CCC TTT AGT TGC GAT TGG ACA CCA ACA GAT GAC AGA ATA GGG CTT CCC CAT GAC AAT TAC CTC CGA	8568
2708	Ile Ser Trp Ala Pro Ala Pro Phe Ser Cys Asp Trp Thr Pro Thr Asp Arg Ile Gly Leu Pro His Asp Asn Tyr Leu Arg	2735
8569	GTG GAG ACA AAG TGC CCC TGT TAC AGG ATG AAA GCG GTA AAA AAC TGC GCT GCG GAG TTG AGA CTT CTG GAG GAA GCG GGT	8652
2736	Val Glu Thr Lys Cys Pro Cys Gly Tyr Arg Met Lys Ala Val Lys Asn Cys Ala Gly Glu Leu Arg Leu Leu Glu Gly Gly	2763
8653	TCA TTC CTC TGC AGA AAT AAA TTC GGT AGA GGC TCA CAA AAC TAC AGG GTG ACA AAA TAC TAT GAT GAC AAT TTA TCA GAA ATA	8736
2764	Ser Phe Leu Cys Arg Asn Lys Phe Gly Arg Gly Ser Gln Asn Tyr Arg Val Thr Lys Tyr Asp Asn Leu Ser Glu Ile	2791
8737	AAA CCA GTG ATA AGA ATG GAA GGA CAC GTG GAA CTG TAT TAC AAG GCG GCC ACT ATC AAA CTG GAT TTT AAC AAC AGT AAA ACG	8820
2792	Lys Pro Val Ile Arg Met Glu Gly His Val Glu Leu Tyr Tyr Lys Glu Ala Thr Ile Lys Leu Asp Phe Asn Asn Ser Lys Thr	2819
8821	GTA CTG GCA ACT GAC AAA TGG GAG GTT GAC CAC TCC ACC CTG GTT AGG GCA CTC AAG AGG TAC ACA GGG GCT GGA TAT CGA GGG	8904
2820	Val Leu Ala Thr Asp Lys Trp Glu Val Asp His Val Asp His Lys His Leu Ile Gln Arg Asp Cys Ala Thr Ile Thr Lys Asp Lys Val Cys Phe Ile	2847
8905	GCG TAT TTG GGT GAG AAA CCT AAC CAT AAA CAT CTG ATA CAG AGA GAC TGT GCA ACG ATT ACC AAA GAC AAG GTC TGC TTC ATC	8988
2848	Ala Tyr Leu Gly Glu Lys Pro Asn His Lys Asn His Lys Asn Leu Thr Arg Leu Ile Glu Leu Val His Lys Asn Asn	2875
8989	AAA ATG AAG AGA GGG TGT GCG TTC ACT TAT GAC CTA TCC CTC CAC AAC CTT ACC CGG CTA ATC GAA TTG GTA CAC AAG AAT AAC	9072
2876	Lys Met Lys Arg Gly Cys Ala Phe Thr Tyr Asp Leu Ser Leu His Asn Leu Thr Arg Leu Ile Glu Leu Val His Lys Asn Asn	2903
9073	CTG GAA GAT AGA GAA ATC CCT GCT GTG ACG GTT ACA ACC TGG CTG GCC TAC ACA TTT GTG AAT GAA GAC ATA GGG ACC ATA AAA	9156
2904	Leu Glu Asp Arg Glu Ile Pro Ala Val Thr Val Thr Trp Leu Ala Tyr Thr Phe Val Asn Glu Asp Ile Gly Thr Ile Lys	2931
9157	CCA ACT TTT GGG GAA AAG GTG ACA CCG GAG GAG GTA GTC TTG CAG CCT GCT GTG GTG GAC ACA ACA GAT GTA	9240
2932	Pro Thr Phe Gly Glu Lys Val Thr Pro Glu Lys Gln Glu Val Val Leu Gln Pro Ala Val Val Asp Thr Thr Asp Val	2959

9241 GCC GTG ACC GTG GTA GGG GAA ACC TCT ACT ATG AAT ACA GGG GAG ACC CCG ACA ACA TTT ACC AGC TTA GGT TCG GAC TCG AAG 9324
 2960 Ala Val Thr Val Val Gly Glu Thr Ser Thr Met Thr Thr Gly Glu Thr Pro Thr Thr Phe Thr Ser Leu Gly Ser Asp Ser Lys 2967

 9325 GTC CGA CAA GTC CTG AAG CTG GGC GTG GAC GAT GGT CAA TAC CCC GGG CCT AAT CAG CAG AGA GCA AGC CTG CTC GAA GCT ATA 9408
 2988 Val Arg Gln Val Val Leu Lys Leu Gly Val Asp Asp Gly Gln Tyr Pro Gly Pro Asn Gln Gln Arg Ala Ser Leu Leu Glu Ala Ile 3015

 9409 CAA GGT GTG GAT GAA AGG CCC TCG GTA CTG ATA CTG GGG TCT GAT AAG GCC ACC TCC AAT AGG GTC AAG ACC GCA AAG AAT GTG 9492
 3016 Gln Gly Val Asp Glu Arg Pro Ser Val Leu Ile Leu Gly Ser Asp Lys Ala Thr Ser Asn Arg Val Lys Thr Ala Lys Asn Val 3043

 9493 AAG ATA TAT AGG AGC AGG GAC CCC CTG GAA CTG AGA GAA ATG ATG AAA AGG GGA AAA ATC CTA GTC GTA GCC TTG TCT ACA GTC 9576
 3044 Lys Ile Tyr Arg Ser Arg Asp Pro Leu Glu Leu Arg Glu Met Met Lys Arg Gly Lys Ile Leu Val Val Ala Leu Ser Arg Val 3071

 9577 GAT ACC GCT CTG AAA TTC GTT GAT TAC AAA GGC ACC TTC CTG ACC AGA GAG ACC CTA GAG GCA TTA AGT CTG GGT AAG CCT 9660
 3072 Asp Thr Ala Leu Leu Lys Phe Val Asp Tyr Lys Gly Thr Phe Leu Thr Arg Glu Thr Leu Glu Ala Leu Ser Leu Gly Lys Pro 3099

 9661 AAG AAA AGA GAC ATA ACT AAA GCA GAA GCA TGG CTG CTG CCG CTC GAA GAG CAA ATA GAA GAG CTG CCT GAC TGG TTC GCA 9744
 3100 Lys Lys Arg Asp Ile Thr Lys Ala Glu Ala Gln Trp Leu Leu Arg Leu Glu Asp Gln Ile Glu Glu Leu Pro Asp Trp Phe Ala 3127

 9745 GCC AAG GAA CCC ATA TTT CTA GAA GCC AAC ATT AAA CGT GAC AAG TAT CAC CTG GTA GGG GAC ATA GCC ACT ATT AAA GAA ALA 9828
 3128 Ala Lys Glu Pro Ile Phe Leu Glu Ala Asn Ile Lys Arg Asp Lys Tyr His Leu Val Gly Asp Ile Ala Thr Ile Lys Glu Lys 3155

 9829 GCC AAA CAA CTG GGG GCA ACA GAC TCC ACA AAG ATA TCA AAG GAG GTT GGC GCG AAA GTG TAT TCT ATG AAG CTG AGT AAC TGG 9912
 3156 Ala Lys Gln Leu Gly Ala Thr Asp Ser Thr Lys Ile Ser Lys Glu Val Gly Ala Lys Val Tyr Ser Met Lys Leu Ser Asn Trp 3183

 9913 GTG ATA CAA GAA GAG AAT AAA CAA GGC AGC CTT GCC CCC CTG TTT GAA GAG CTC CTG CAA CAG TGC CCA CCC GGG GGC CAG AAC 9996
 3184 Val Ile Gln Glu Glu Asn Lys Gln Gly Ser Leu Ala Pro Leu Phe Glu Glu Leu Leu Gln Gln Cys Pro Pro Gly Gly Gln Asn 3211

 9997 AAA ACC ACA CAT ATG GTC TCA GCC TAC CAA CTA GCT CAA GGG AAT TGG GTG CCA GTT AGT TGC CAC GTG TTC ATG GGG ACC ATA 10080
 3212 Lys Thr Thr His Met Val Ser Ala Tyr Gln Leu Ala Gln Gly Asn Trp Val Pro Val Ser Cys His Val Phe Met Gly Thr Ile 3239

 10081 CCC GCC AGA AGA ACC AAG ACT CAT CCT TAT GAG GCA TAC GTT AAG CTA AGG GAG TTG GTA GAT GAA CAT AAG ATG AAG GCA TTA 10164
 3240 Pro Ala Arg Arg Thr Lys Thr His Pro Tyr Glu Ala Tyr Val Lys Leu Arg Glu Leu Val Asp Glu His Lys Met Lys Ala Leu 3267

 10165 TGT GGC GGA TCA GGC CTA ACT AAG CAC AAC GAA TGG GTA ATT GGC AAG GTC AAG TAT CAA GGA AAC CTG AGG ACC AAA CAC ATG 10248
 3268 Cys Gly Gly Ser Gly Leu Ser Lys His Asn Glu Trp Val Ile Gly Lys Val Lys Tyr Gln Gly Asn Leu Arg Thr Lys His Met 3295

10249 TTG AAC CCC GGA AAG GTG GCG GAG CAA CTG CAC AGA GAA GGG TAC AGG CAC AAT GTG TAT JAT AAG ACA ATA GGT TCA GTG ATG 10332
3296 Leu Asn Pro Gly Lys Val Ala Glu Gln Leu His Arg Glu Gly Tyr Arg His Asn Val Tyr Asn Lys Thr Ile Gly Ser Val Met 3323

10333 ACA GCA ACT GGT ATC AGG CTG GAG AAG TTA CCT GTG GTT AGG GCC CAA ACA GAC ACA ACC AAC TTC CAC CAA GCA ATA AGG GAT 10416
3324 Thr Ala Thr Gly Ile Arg Leu Glu Lys Leu Pro Val Val Arg Ala Gln Thr Asp Thr Asn Phe His Gln Ala Ile Arg Asp 3351

10417 AAA ATA GAC AAG GAG GAG AAC CTA CAG ACC CCT GGC TTG CAT AAG AAG TTA ATG GAA GTC TTC AAT GCA TTA AAA AGA CCC GAG 10500
3352 Lys Ile Asp Lys Glu Glu Asn Leu Gln Thr Pro Gly Leu His Lys Lys Leu Met Glu Val Phe Asn Ala Leu Lys Arg Pro Glu 3379

10501 CTT GAG GCC TCT TAT GAC GCT GTG GAT TGG GAG GAA TTG GAG AGA GGA ATA AAT AGG AAG GGT GCT GCT GGT TTC TTC GAA CGC 10584
3380 Leu Glu Ala Ser Tyr Asp Ala Val Asp Trp Glu Glu Leu Glu Arg Gly Ile Asn Arg Lys Gly Ala Ala Gly Phe Phe Glu Arg 3407

10585 AAG AAC ATA GGA GAG GTT TTG GAT TCG GAA AAA AAT AAA GTC GAA GAG GTT ATT GAC AGT TTG AAA AAA GGT AGG AAT ATC AGA 10668
3408 Lys Asn Ile Gly Glu Val Leu Asp Ser Glu Lys Asn Lys Val Glu Glu Val Ile Asp Ser Leu Lys Lys Gly Arg Asn Ile Arg 3435

10669 TAC TAC GAA ACT GCA ATC CCG AAA AAC GAG AAG AGG GAT GTC AAT GAT GAC TGG ACC GCT GGT GAT TTC GTA GAT GAG AAG AAG 10752
3436 Tyr Tyr Glu Thr Ala Ile Pro Lys Asn Glu Lys Arg Asp Val Asn Asp Asp Trp Thr Ala Gly Asp Phe Val Asp Glu Lys Lys 3463

10753 CCA AGA GTG ATA CAA TAC CCT GAG GCT AAA ACT AGG TTG GCT ATT ACT AAG GTA ATG TAC AAG TGG GTC AAA CAG AAG CCA GTT 10836
3464 Pro Arg Val Ile Gln Tyr Pro Glu Ala Lys Thr Arg Leu Ala Ile Thr Lys Val Met Tyr Lys Trp Val Lys Gln Lys Pro Val 3491

10837 GTC ATA CCG GGT TAT GAA GGT AAG ACA CCC CTG TTT CAA ATT TTT GAC AAA GTG AAG AAA GAA TGG GAT CAA TTC CAA AAC CCT 10920
3492 Val Ile Pro Gly Tyr Glu Gly Lys Thr Pro Leu Phe Gln Ile Phe Asp Lys Val Lys Lys Glu Trp Asp Gln Phe Gln Asn Pro 3519

10921 GTG GCA GTT AGC TTT GAT ACC AAA GCG TGG GAT ACC CAG GTA ACC ACA AGG GAT TTG GAG CTA ATA AGG GAT ATA CAG AAG TTC 11004
3520 Val Ala Val Ser Phe Asp Thr Lys Ala Trp Asp Thr Gln Val Thr Thr Arg Asp Leu Glu Leu Ile Arg Asp Ile Gln Lys Phe 3547

11005 TAT TTT AAA AAG AAA TGG CAC AAA TTC ATT GAC ACC CTA ACC CAG CTA CCA GAA GTA CCC GTA ATC AGT GCC GAC GGG GAG 11088
3548 Tyr Phe Lys Lys Lys Trp His Lys Phe Ile Asp Thr Leu Thr Lys His Met Ser Glu Val Pro Val Ile Ser Ala Asp Gly Glu 3575

11089 GTA TAC ATA AGG AAA GGT CAG AGA GGC AGT GGG CAA CCT GAC ACQ AGC GCA GGC AAC AGC ATG TTG AAT GTG TTG ACA ATG GTG 11172
3576 Val Tyr Ile Arg Lys Gly Gln Arg Gly Ser Gly Gln Pro Asp Thr Ser Ala Gly Asn Ser Met Leu Asn Val Leu Thr Met Val 3603

11173 TAT GCC TTC TGC GAG GCC AGG GTA CCC TAC AAG AGT TTT GAC AGA GTG GCA AAG ATC CAT GTC TGC GGG GAT GAT GGT TTC 11258
3604 Tyr Ala Phe Cys Glu Ala Thr Gly Val Pro Tyr Lys Ser Phe Asp Arg Val Ala Lys Ile His Val Cys Gly Asp Asp Gly Phe 3631

11257 CTG ATT ACC GAA AGA GCT CTC GGT GAG AAA TTT GCG AGT AAA GGA GTC CAG ATC CTA TAC GAA GCT GGG AAG CCT CAA AAG ATC 11340
3632 Leu Ile Thr Glu Arg Ala Leu Gly Glu Lys Phe Ala Ser Lys Gly Val Gln Ile Leu Tyr Glu Ala Gln Lys Pro Gln Lys Ile 3659
11341 ACT GAA GGG GAC AAG ATG AAA GTA GCC TAT CAG TTT GAT GAT ATC GAG TTC TGC TCC CAT ACA CCA GTA CAA GTG AGG TGG TCA 11424
3660 Thr Glu Gly Asp Lys Met Lys Val Ala Tyr Gln Phe Asp Asp Ile Glu Phe Cys Ser His Thr Pro Val Gln Val Arg Trp Ser 3687
11425 GAC AAT ACT TCC AGC TAC ATG CCG GGA AGG AAC ACG ACT ACA ATC CTG GCT AAA ATG GCT ACA AGG TTG GAT TCC AGT GGT GAG 11508
3688 Asp Asn Thr Ser Ser Tyr Met Pro Gly Arg Asn Thr Thr Ile Leu Ala Lys Met Ala Thr Arg Leu Asp Ser Ser Gly Glu 3715
11509 AGG GGT ACT ATA GCA TAT GAG AAG GCA GTG GCG TTC AGC TTT TTG TTG ATG TAC TCC TCG AAC CCA CTG ATC AGA AGG ATA TGC 11592
3716 Arg Gly Thr Ile Ala Tyr Glu Lys Ala Val Ala Phe Ser Phe Leu Leu Met Tyr Ser Trp Asn Pro Leu Ile Arg Arg Ile Cys 3743
11593 TTA CTG GTG TTG TCA ACT GAG TTG CAA GTG AGA CCA GGG AAG TCA ACC ACC TAT TAC TAT GAA GGG GAC CCA ATA TCC GCT TAC 11676
3744 Leu Leu Val Leu Ser Thr Glu Leu Gln Val Arg Pro Gly Lys Ser Thr Thr Tyr Tyr Glu Gly Asp Pro Ile Ser Ala Tyr 3771
11677 AAG GAA GTC ATT GGC CAC AAT CTC TTT GAC CTT AAA AGA ACA AGC TTC GAA AAG CTA GCA AAG TTA AAT CTC AGC ATG TCC ACG 11760
3772 Lys Glu Val Ile Gly His Asn Leu Phe Asp Leu Lys Arg Thr Ser Phe Glu Lys Leu Ala Lys Leu Asn Leu Ser Met Ser Thr 3799
11761 CTC GGG GTG TGG ACT AGA CAC ACT AGC AAG AGA TTA CTA CAA GAT TGT GTC AAT GGT GGC ACC AAA GAG GGC AAC TGG CTG GTC 11844
3800 Leu Gly Val Trp Thr Arg His Thr Ser Lys Arg Leu Leu Gln Asp Cys Val Asn Val Gly Thr Lys Glu Gly Asn Trp Leu Val 3827
11845 AAT GCA GAC AGA CTA GTG AGT AGT AAG ACA GGA AAC AGG TAT ATA CCT GGA GAG GGC CAC ACC CTA CAA GGG AAA CAT TAT GAA 11928
3828 Asn Ala Asp Arg Leu Val Ser Ser Lys Thr Gly Asn Arg Tyr Ile Pro Gly Glu Gly His Thr Leu Gln Gly Lys His Tyr Glu 3855
11929 GAA CTG ATA CTA AGG AAA CCG ATC GGT AAC TTT GAA GGG ACC GAT AGG TAT AAC TTG GGG CCA ATA GTC AAT GTA GTG TTG 12012
3856 Glu Leu Ile Leu Ala Arg Lys Pro Ile Gly Asn Phe Glu Gly Thr Asp Arg Tyr Asn Leu Gly Pro Ile Val Asn Val Val Leu 3883
12013 AGG AGA CTA AAA ATT ATG ATG GCG CTG ATA GGA AGG GGG GTG TGA GCA TGG TGG GCC CTT GAT CCG GCC CTA TCA GTA GAA 12096
3884 Arg Arg Leu Lys Ile Met Met Ala Leu Ile Gly Arg Gly Val End 3899
12097 CCC TAT TGT AAA TAA CAT TAA CTT ATT AAT TAT TTA GAT ACT ATT TAT TTA TTT ATT TAT TTA TTG AAT GAG CAA GTA CTG 12180
12181 GTA CAA ACT ACC TCA TGT TAC CAC ACT ACA CTC ATT TTA ACA GCA CTT TAG CTG GAG GGA AAA CCC TGA COT CCA CAG TTG GAC 12264
12265 TAA GGT AAT TTC CTA ACG GC 12284

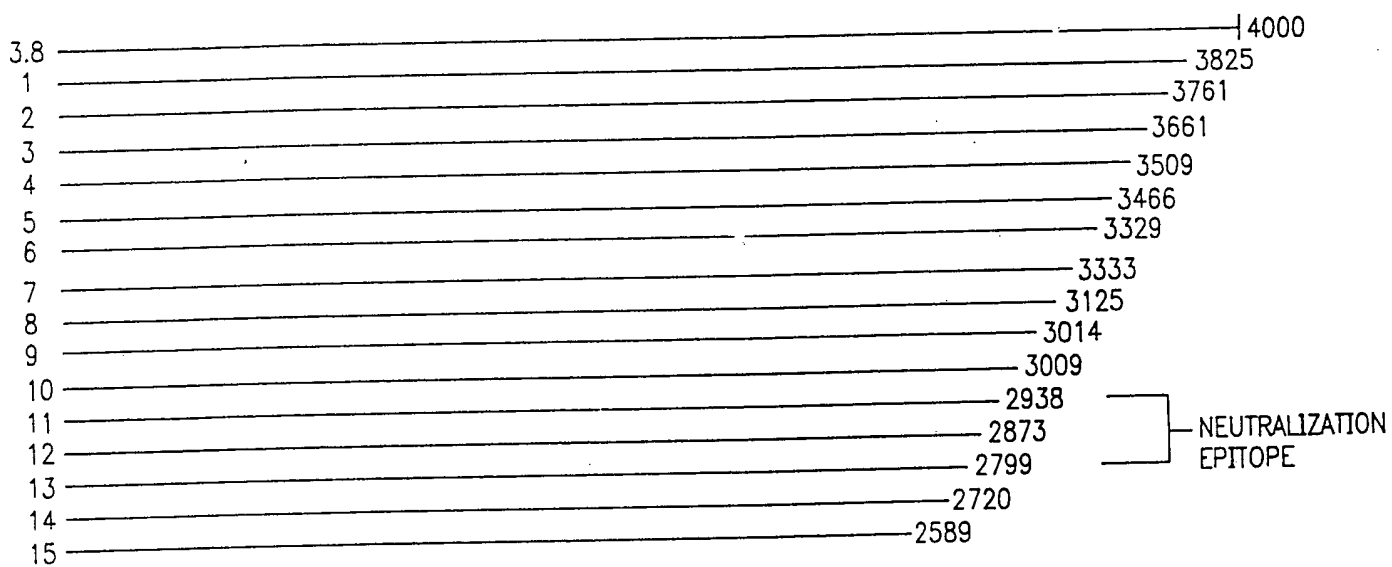


FIG. 2 (Formerly figure 4)

Figure 3. Nucleotide sequence.

HCV

AGTGACAACGGCACTAATGGTATTCAGCGAGCCATGTATCTTAGAGGGGTAAACAGG
AGCTTACATGGGATCTGGCCCGAGAAAATATGCAAGGGGGTCCCCACTCATCTGGCC
ACTGACACGGAACTGAAAGAGATACGCGGGATGATGGATGCCAGCGAGAGGACAAAC
TATACGTGCTGTAGGTTACAAAGACATGAATGGAACAAACATGGATGGTGTAACCTGG
TACAACATAGACCCTTGGATTTCAGTTAATGAACAGGACCCAAACAAATTTGACAGAA
GGCCCTCCAGATAAG

Deduced amino acid sequence.

HCV S D N G T N G I Q R A M Y L R G V N R S
 L H G I W P E K I C K G V P T H L A T D
 T E L K E I R G M M D A S E R T N Y T C
 C R L Q R H E W N K H G W C N W Y N I D
 P W I Q L M N R T Q T N L T E G P P D K

Figure 4

